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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Peter Hachimann

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09/13/2006

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EXAMINER

MORRISON, THOMAS A

ART UNIT

PAPER NUMBER

3653

DATE MAILED: 09/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/689,973	HACHIMANN ET AL.	
	Examiner	Art Unit	
	Thomas A. Morrison	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-7 and 10-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-7 and 10-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The indicated allowability of claims 2, 4-7 and 19-20 is withdrawn in view of the newly discovered reference(s) to U.S. Patent No. 5,634,636 (Jackson et al.).

Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claim 2, it is unclear how many guide vanes are claimed. Independent claim 19 recites, "said flow ducts having guide vanes". Then, claim 2, which now depends from claim 19, recites, "The machine according to claim 19, further comprising guide vanes provided in said flow ducts". It is unclear if the recited guide vanes in claim 2 are the same or different from the previously recited guide vanes in claim 19.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 2-6, 10-17 and 19-20, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,634,636 (Jackson et al.).

Regarding independent claim 19, Figs. 1-3 show a sheet-processing machine, comprising:

a blast or blown-air supply system (Figs. 2-3); and

a pneumatic sheet-guiding device (120) connected to the blast or blown-air supply system (Figs. 2-3);

the sheet-guiding device (120) having flow ducts (154) for aligning sheet-carrying air flows (160), the flow ducts (154) having guide vanes (i.e., side walls of 154) and throttles or restrictors (150 or 152) disposed therein;

the sheet-guiding device (120) having a sheet-guiding surface (111);

the sheet-guiding surface (111) having air passage openings (near 126) formed therein for sheets being dragged over the air passage openings (near 126) in a sheet travel direction and for expelling the sheet-carrying air flows during operation;

the air passage openings (near 126) in the sheet-guiding surface (111) forming opening cross-sections of the flow ducts (154), the opening cross-sections being slots having a length and a width, the length being multiple times greater than the width. See lengths and widths of slots in Fig. 2.

Regarding claim 2, as best understood, Fig. 2 shows guide vanes (i.e., side walls) provided in the flow ducts (154).

Regarding claim 3, Fig. 2 shows that the slots are disposed symmetrically with respect to a line of symmetry.

Regarding claim 4, Fig. 2 shows that the air passage openings (near 126) include waste-air openings (i.e., openings in valves 152) assigned to the slots.

Regarding claim 5, the waste-air openings (i.e., openings in valves 152) can be considered waste-air slots.

Regarding claim 6, Figs. 1-3 show that the waste-air openings (i.e., openings in valves 152) are on a side of the sheet-guiding device facing away from the sheet-guiding surface (111), and are in communication with the atmosphere.

Regarding claim 10, Fig. 2 shows that at least some of the slots are inclined with respect to the sheet travel direction.

Regarding claim 11, Figs. 2 shows slots oriented in the sheet travel direction.

Regarding claim 12, Fig. 2 shows that the slots have a width varying along the length thereof. In particular, the slots have rounded end portions that narrow as you move along the lengths of the slots toward the end portions.

Regarding claim 13, Fig. 2 shows that the slots have a variable width.

Regarding claim 14, Fig. 2 shows that the slots are respectively disposed repeatedly on both sides of a line of symmetry extending in the sheet travel direction, the line of symmetry having a central location with respect to the sheet guiding surface (111).

Regarding claim 15, Fig. 2 shows slots with different lengths.

Regarding claim 16, Fig. 2 shows that the blast-air supply system (Fig. 2) has chambers (170 and 172) respectively communicating with the slots.

Regarding claim 17, as best understood, Fig. 2 shows a multiple configuration of the slots to be acted upon individually with blast air. See also column 2, lines 33-34.

Regarding claim 20, Fig. 2 shows that the throttles or restrictors (152) are formed of air-permeable material.

4. Claim 7 is rejected under 35 U.S.C. 102(b) as anticipated by the Jackson et al. patent or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Jackson et al. patent in view of U.S. Patent Publication No. 20010011509. The elements of claims 4 and 19 that are included in claim 7 are outlined in the above rejection. With regard to the recited vacuum generator of claim 7, column 5, lines 50-53 of Jackson et

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al. state, "As shown in FIG. 2, plenum 172 is separated from plenum 170 by partition 171, with **plenum 172 being maintained at a lower air pressure** than plenum 170." (emphasis added). Whatever structure maintains the plenum 172 at the lower air pressure can be considered a vacuum generator that acts on the waste-air openings (i.e., openings in valves 152). Alternatively, U.S. Patent Publication No. 20010011509 discloses that it is well known to provide a sheet-processing machine (Fig. 1 or Fig. 8) with a vacuum generator (7 in Fig. 1 or 13' in Fig. 8) for the purpose of maintaining waste-air openings (near 10 in Fig. 1 and near 3' in Fig. 8) at a negative pressure. See e.g., Figs. 1 and 8 and numbered paragraphs [0026] and [0028] of U.S. Patent Publication No. 20010011509. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the sheet-processing machine of Jackson et al. with a vacuum generator for the purpose of maintaining the waste-air openings of Jackson et al. at a negative pressure, as taught by U.S. Patent Publication No. 20010011509.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over The Jackson et al. patent as applied to claim 19 above, and further in view of U.S. Patent Publication No. 20010011509.

Regarding claim 18, Figs. 2-3 of Jackson et al. disclose a sheet-processing machine having waste-air openings (i.e., openings in valves 152) and having suction sides (near 172) communicating with the waste-air openings (i.e., openings in valves 152) and pressure sides (near 150) communicating with the slots. However, Jackson et al. does not explicitly disclose blowers assigned to the slots, as claimed.

U.S. Patent Publication No. 20010011509 discloses that it is well known to provide a sheet-processing machine (Fig. 8) with blowers (13') assigned to slots (4a and 4b) for the purpose of applying vacuum to suction sides (5') communicating with waste-air openings (near 3'), and also applying pressure to pressure sides (near 2') communicating with the slots (4a and 4b). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the sheet-processing machine of Jackson et al. with blowers assigned to the slots for the purpose of applying vacuum to the suction sides communicating with the waste-air openings of Jackson et al., and also applying pressure to pressure sides communicating with the slots of Jackson et al., as taught by U.S. Patent Publication No. 20010011509.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

09/05/2006

A handwritten signature in black ink, appearing to be 'PM' or similar initials, written in a cursive style.

PATRICK MACKEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600